

Response
Serial No. 10/046,882
Attorney Docket No. 020044

AMENDMENTS TO THE CLAIMS:

Listing of claims:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently Amended): An Internet printing method for a client to control the printing of a print server via the Internet using the Internet Printing Protocol, comprising:

~~a step of~~ opening a server site of ~~said the~~ print server in a proxy unit on ~~said the~~ Internet according to a request from ~~one of said the~~ client ~~and said~~ and/or the print server;

~~a step of~~ accessing ~~said the~~ server site using ~~said the~~ Internet Printing Protocol with ~~said the~~ client; and

~~a step of~~ converting ~~the a~~ printing service request of ~~said the~~ client using ~~said the~~ Internet Printing Protocol into a protocol which allows circumventing the firewall of ~~said the~~ print server, and transferring ~~said the~~ converted printing service request to ~~said the~~ print server according to ~~said the~~ access.

2. (Currently Amended): The Internet printing method according to Claim 1, further comprising:

~~a step of~~ returning ~~the an~~ execution result of ~~said the~~ printer server for ~~said the~~ printing service request to ~~said the~~ proxy unit, and returning the execution result to ~~said the~~ client from ~~said the~~ proxy unit using ~~said the~~ Internet Printing Protocol.

Response
Serial No. 10/046,882
Attorney Docket No. 020044

3. (Currently Amended): The Internet printing method according to Claim 1, further comprising:

~~a step of~~ connecting ~~said~~ the proxy unit and ~~said~~ the print server according to the connection request from ~~said~~ the print server.

4. (Currently Amended): The Internet printing method according to Claim 3, wherein ~~said~~ the proxy unit plays the role of a server and ~~said~~ the print server plays ~~the~~ a role of a client when ~~said~~ the proxy unit and ~~said~~ the print server are connected, and ~~said~~ the proxy unit plays ~~the~~ a role of a client and ~~said~~ the print server plays the role of a server when ~~said~~ the printing service is requested after ~~said~~ the connection.

5. (Currently Amended): The Internet printing method according to Claim 1, further comprising:

~~a step of~~ transmitting a printing command from ~~said~~ the client to ~~said~~ the print server using a protocol which can circumvent ~~said~~ the firewall; and

~~a step of~~ connecting ~~said~~ the proxy unit and ~~said~~ the print server according to the connection request from ~~said~~ the print server corresponding to ~~said~~ the printing command.

Response
Serial No. 10/046,882
Attorney Docket No. 020044

6. (Currently Amended): The Internet printing method according to Claim 1, further comprising:

a step of transmitting a printing command from ~~said~~ the client to ~~said~~ the proxy unit using ~~said~~ the Internet Printing Protocol;

~~a step of~~ transferring ~~said~~ the printing command from ~~said~~ the proxy unit to ~~said~~ the print server using a protocol which can circumvent ~~said~~ the firewall; and

~~a step of~~ connecting ~~said~~ the proxy unit and ~~said~~ the print server according to the connection request from ~~said~~ the print server corresponding to ~~said~~ the transferred printing command.

7. (Currently Amended): The Internet printing method according to Claim 1, further comprising:

~~a step of~~ constantly connecting ~~said~~ the proxy unit and ~~said~~ the print server according to the connection request from ~~said~~ the print server.

8. (Currently Amended): An Internet printing system for a client to control the printing for a print server via the Internet using the Internet Printing Protocol, comprising:

~~said~~ the client ~~for communicating~~ that communicates at least by using the Internet Printing Protocol;

Response
Serial No. 10/046,882
Attorney Docket No. 020044

~~said the~~ print server ~~which that~~ is protected by a firewall on ~~said the~~ Internet and for executing a printing request; and

a proxy unit ~~for opening~~ that opens a server site of ~~said the~~ print server according to a request from ~~one of said the~~ client ~~and said~~ and/or the print server, converts the printing service request of ~~said the~~ client using ~~said the~~ Internet Printing Protocol into a protocol which allows circumventing the firewall of ~~said the~~ print server at the access of ~~said the~~ client to ~~said the~~ server site by ~~said the~~ Internet Printing Protocol, and transfers the request to ~~said the~~ print server.

9. (Currently Amended): The Internet printing system according to Claim 8, wherein ~~said the~~ print server returns the execution result for ~~said the~~ printing service request to ~~said the~~ proxy unit and ~~said the~~ proxy unit returns ~~said the~~ execution result to ~~said the~~ client using ~~said the~~ Internet Printing Protocol.

10. (Currently Amended): The Internet printing system according to Claim 8, wherein ~~said the~~ proxy unit is connected to ~~said the~~ print server according to the connection request from ~~said the~~ print server.

11. (Currently Amended): The Internet printing system according to Claim 10, wherein ~~said the~~ proxy unit plays ~~the~~ a role of a server and ~~said the~~ print server plays ~~the~~ a role of a client when ~~said the~~ proxy unit and ~~said the~~ print server are connected, and ~~said the~~ proxy unit plays ~~the~~

Response
Serial No. 10/046,882
Attorney Docket No. 020044

a role of a client and ~~said the~~ print server plays ~~the~~ a role of a server when ~~said the~~ printing service is requested after ~~said the~~ connection.

12. (Currently Amended): The Internet printing system according to Claim 8, wherein ~~said the~~ client transmits a printing command to ~~said the~~ print server using a protocol which can circumvent ~~said the~~ firewall, and ~~said the~~ proxy unit connects with ~~said the~~ print server according to the connection request from ~~said the~~ print server corresponding to ~~said the~~ printing command.

13. (Currently Amended): The Internet printing system according to Claim 8, wherein ~~said the~~ client transmits a printing command to ~~said the~~ proxy unit using ~~said the~~ Internet Printing Protocol, and ~~said the~~ proxy unit transfers ~~said the~~ printing command to ~~said the~~ print server using a protocol which can circumvent ~~said the~~ firewall, and connects with ~~said the~~ print server according to the connection request from ~~said the~~ print server corresponding to ~~said the~~ transferred printing command.

14. (Currently Amended): The Internet printing system according to Claim 8, wherein ~~said the~~ proxy unit is constantly connected with ~~said the~~ print server according to the connection request from ~~said the~~ print server.

Response
Serial No. 10/046,882
Attorney Docket No. 020044

15. (Currently Amended): A proxy unit for a client to control the printing for a print server via the Internet using the Internet Printing Protocol, comprising:

a server site of ~~said~~ the print server to be opened according to ~~the~~ a request from ~~one of~~ said the client and said and/or the print server; and

an exchanger for converting a printing service request of ~~said~~ the client by the Internet Printing Protocol to a protocol which allows circumventing the firewall of ~~said~~ print server at the access of ~~said~~ client to ~~said~~ server site by ~~said~~ Internet Printing Protocol, and for transferring the request to ~~said~~ print server.

16. (Currently Amended): The proxy unit according to Claim 15, wherein ~~said~~ exchanger receives ~~the~~ an execution result of ~~said~~ print server for ~~said~~ printing service request and returns to ~~said~~ the client by ~~said~~ the Internet Printing Protocol.

17. (Currently Amended): The proxy unit according to Claim 15, wherein ~~said~~ the proxy unit connects with ~~said~~ the print server according to the connection request from ~~said~~ the print server.

18. (Currently Amended): The proxy unit according to Claim 17, wherein ~~said~~ the proxy unit plays ~~the~~ a role of a server and ~~said~~ the print server plays ~~the~~ a role of a client when ~~said~~ the proxy unit and ~~said~~ the print server are connected, and ~~said~~ the proxy unit plays ~~the~~ a role of a

Response
Serial No. 10/046,882
Attorney Docket No. 020044

client and ~~said~~ the print server plays ~~the~~ a role of a server when ~~said~~ the printing service is requested after ~~said~~ the connection.

19. (Currently Amended): A printer server for a client to control printing via the Internet using the Internet Printing Protocol, comprising:

a network interface unit for communicating; and

a processing unit ~~for requesting that requests~~ to a proxy unit installed on ~~said~~ the Internet to open a server site of ~~said~~ the print server, receiving a printing service request from ~~said~~ the proxy unit where a printing service request of ~~said~~ the client by Internet Printing Protocol is converted into a protocol which allows circumventing the firewall of ~~said~~ the print server at the access of ~~said~~ the client to ~~said~~ the server site by ~~said~~ the Internet Printing Protocol, and ~~executing said~~ executes the printing service request.

20. (Currently Amended): The print server according to Claim 19, wherein ~~said~~ the proxy unit plays ~~the~~ a role of a server and ~~said~~ the print server plays ~~the~~ a role of a client when ~~said~~ the proxy unit and ~~said~~ the print server are connected, and ~~said~~ the proxy unit plays the role of a client and ~~said~~ the print server plays ~~the~~ a role of a server when ~~said~~ the printing service is requested after ~~said~~ the connection.